WHAT IS CLAIMED IS:

- 1. For use in combination with an over-the-wire balloon catheter having a reference radiopaque marker thereon at a known distance from a distal end of the catheter, the improvement which comprises:
 - an elongated flexible guide wire having a plurality of longitudinally spaced radiopague markers on a distal portion thereof with adjacent markers on the guide wire being longitudinally spaced by a distance equal to the known distance between the distal end of the catheter and its reference radiopague marker.

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- The guide wire of claim I wherein a proximal cortion of the guide wire is a solid wire.
- 3. The guide wire of claim 1 wherein the distal portion of the guide wire is defined by a coil spring.
- 4. The guide wire of claim 1 wherein the distal portion of the guide wire has a radiopaque distal tip 1.5 cm in length.
- 5. The guide wire of claim 4 wherein the distance between adjacent markers on the guide wire is 1.5 cm, a first marker located 1.5 cm from a proximal end of the distal tip.

- 6. The guide wire of claim 1 wherein the distance between adjacent markers is 1.5 cm.
- 7. The guide wire of claim 1 wherein the guide wire has a radiopaque tip marker, and wherein the width of each marker on the guide wire, other than the tip marker, is 1 mm.
- 8. The guide wire of claim 2, wherein the distal portion of the guide wire is 25 cm in length.
- 9. A method of positioning a balloon catheter in an artery by use of fluoroscopy, comprising the steps of:

advancing a guide wire having a plurality of radiopaque markers at spaced intervals adjacent its distal and to a desired position relative to a stenosis and

advancing a balloon catheter carrying a radiopaque marker over the guide wire until the radiopaque marker of the balloon catheter is in a predetermined positional relationship to one of the radiopaque markers of the guide wire.

10. The method of claim 9, and further comprising the steps of:

maintaining the guide wire in position relative to the stenosis;

withdrawing the balloon catheter off of the guide wire, from a proximal end of the guide wire; and

advancing a second halloon catheter radiopaque marker carrying over the guide wire, from the proximal end gujáe the wire, until the second balloon catheter is in a predetermined positional relationship to of radiopaque markers of the guide wire.

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